CPSC 2600 Assignment 5: Client-side routing with React Router

Learning goal:

- Learn how to use the React Router library to implement client-side routing.

Setup and prerequisites:

1. Please watch this week's lecture videos and complete the readings/tutorial videos assigned.

2. You can continue from where you left off in assignment 4 (or 3). You may also choose to use the starter files provided in the assignment folder.

Task: Client-side routing with React Router

1. Install `react-router-dom` **version 5.3.0** in your todo list app.

```
npm install react-router-dom@^5.3.0
```

Note: It is important that you install v5.3.0. There are some breaking changes in the latest version (v6) of React Router which may conflict with the instructions that follow.

2. Import `{ BrowserRouter}` from `react-router-dom` in **index.js** and wrap your **<App/>** component with `<BrowserRouter>`

```
ReactDOM.render(
  <React.StrictMode>
    <BrowserRouter>
      <App />
    </BrowserRouter>
  </React.StrictMode>,
  document.getElementById('root')
);
```

3. Create a component named **Home.js**. You should copy over everything from your old **App.js** file.

   - Remember to rename references from **App.js** to **Home.js**. You may also need to fix a few relative paths in the imports.

4. Create a component called **About.js.**

   - You can have some placeholder text returned from this component.

5. Create a component called **Error.js**. This component should return:

   - `<h1>Oops! Page not found!</h1>`

6. Create a component called **Navbar.js.**

   - Return a `<nav>` with Links to Home and About.

7. Clean up your **App.js** file, provide links to Home and About routes:

    ○   Import `{ Route, Switch }` from 'react-router-dom' in App.js

    ○   Import the Home, About, Navbar and Error components into the App.js file.

    ○   Wrap your routes with `<Switch>`. You should have routes for Home, About and Error.

    ○   Your App.js file should look something like this:

```
2   import { Route, Switch } from 'react-router-dom';
3   import './App.css';
4
5   import Home from './components/Home';
6   import About from './components/About';
7   import Navbar from './components/Navbar';
8   import Error from './components/Error';
9
10  function App(props) {
11    return (
12      <div className='todoapp stack-large'>
13        <Navbar />
14        <Switch>
15          <Route path='/' component={Home} exact />
16          <Route path='/about' component={About} />
17          <Route component={Error} />
18        </Switch>
19      </div>
20    );
21  }
22
```
1.

8. Try running your react app and navigate to the about page and home page using the navbar. Try entering an incorrect URL like http://localhost:3000/aa and check if the <Error> component is rendered.

http://localhost:3000/about	http://localhost:3000/
Home | About About page	Home | About What needs to be done? [to do] **Add** All / Active / Completed **3 tasks remaining** ✔ Eat — Edit / Delete ☐ Sleep — Edit / Delete ☐ Repeat — Edit / Delete
http://localhost:3000/aa Home | About **Oops! Page not found!**	

Hand In:

Zip your assignment directory and submit your work in the Assignment 5 folder.

- When you zip your directory, remember to exclude the node modules folder. The marker will download your submission, install the node modules and run your app.

Checklist:

- **[5 marks]** Routes to Home, About and Error pages implemented

Total: 5 marks